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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,793	07/20/2000	Daniel V. Cantrell	BW-406	3645

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EXAMINER

WALLS, DIONNE A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 05/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/619,793

Applicant(s)

CANTRELL, DANIEL V.

Examiner

Dionne A. Walls

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Drewett et al (US. Pat. No. 5,172,708).

Applicant admits, on page 4 of the instant specification, that double wrapped cigarettes using two conventional papers, made with a combination of both flax and wood fibers have been used in smoking products marketed in the past and are still practiced today.

While Applicant may not have admitted that the inner, of the double wrappings, comprises 55-85 % wood fibers and 15-45% flax, or that the wood fiber is about 70% by weight and the flax fiber is about 30% by weight, Drewett discloses that when conventional cigarette wrappers comprise a mixture of wood and textile fibers, said fibers can be mixed in various proportions such that the wrapper properties can be widely varied to confer on the cigarette different characteristics such as smolder rates, air permeability, ash quality, appearance and taste (col. 1, lines 11-19). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, after routine experimentation, to adjust/vary the composition of the inner wrapper, outer wrapper, or both, of the double wrapped cigarettes known in the art and

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arrive at the claimed percentage of flax fibers and wood fibers, in order to confer upon the cigarette optimum characteristics as it relates to parameters such as permeability and ash quality. "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

In re Aller, 220 F.2d 454,456, 105 USPQ 233,235 (CCPA)

Regarding claims 3-5, Drewett et al does disclose smoking articles having wrappers that comprise either of these two types of soft/hard wood fibers (col. 7, lines 20-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to fabricate the inner wrapper of the known double-wrapped cigarettes to include either pine or eucalyptus as its wood fiber source because these types of woody fibers are known materials for cigarette paper fabrication in the tobacco art.

3. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Drewett (US. Pat. No. 5,172,708), and further in view of Schneider et al (US. Pat. No. 4,548,677).

While the known double wrapped cigarettes may not teach that the flax, of its wrappers, is selected from the group consisting of 50-90% flax fibers and 10-50% shive flax fibers, Schneider et al discloses cigarette paper having from 20 – 50% bast fibers of flax (col. 1, lines 43-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate flax having 50% bast fibers (which falls in the claimed range of bast fibers) in order to benefit by its influence on

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diffusing carbon monoxide out of the cigarette as taught in Schneider et al (col. 1, lines 38-41).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopsch et al (US. Pat. No. 5,944,026) in view of Hampl, Jr. (US. Pat. No. 5,921,249) and Drewett et al (US. Pat. No. 5,172,708).

Kopsch et al discloses a cigarette which may be wrapped with two layers of paper, the interior tobacco rod wrapping being of highly porous (10-20,000 CORESTA) paper which can be made mainly or entirely of suitable wood pulp (col. 9, lines 27-36). While Kopsch et al may not disclose that the inner wrap comprises 55 – 85 % wood fibers and 15-45% flax, or that the wood fiber is about 70% by weight and the flax fiber is about 30% by weight, Hampl, Jr. discloses, in its "Background of Invention" section, that one method used for controlling the permeability of a wrapping paper is varying the fiber furnish that is used to make the paper. In general, it is known that if longer fibers are used to construct the wrapping paper, the paper will have a higher permeability (col. 1, lines 49-53). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the inner wrapping of Kopsch et al to include longer fibers in the papermaking furnish used to make said wrapping in order to ensure a highly permeable inner wrapping pursuant to the teaching of Hampl, Jr. While Kopsch et al modified by Hampl, Jr. may not disclose that the longer fibers which are to be included in said highly porous wrapping is flax, Drewett discloses that conventional cigarette wrappers comprise a mixture of wood and textile (i.e. flax) fibers. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the

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invention to add flax fibres (which are longer than wood-pulp fibres) to the inner wood-based wrapper of Kopsch et al modified by Hampl, Jr. because use of cellulosic fiber mixtures (i.e. wood and textile fibres) to comprise cigarette wrappers is known in the tobacco art as disclosed in Drewett, and such mixture would result in a wrapper with higher permeability, due to the presence of the longer fibres, which is the goal of Kopsch et al. Lastly, while Kopsch modified by Hampl, Jr. and Drewett may not explicitly teach an inner wrapper having 55 – 85 % wood fibers and 25-45% flax, or wood fiber of about 70% by weight and flax fiber of about 30% by weight, it would have been obvious to one having ordinary skill in the art at the time of the invention to optimize the composition of the inner wrapper of Kopsch et al, which taught having a majority (if not, an entirety) of wood-based paper, by adding enough longer-length fibers to ensure a highly porous paper, pursuant to the teachings of Hampl, Jr., specifically flax fibers, as taught in Drewett, and arrive at the claimed percentage of flax fibers, in order to achieve the optimum air-permeability of the cigarette wrapper.

Regarding claims 4-5, Drewett et al does disclose smoking articles having wrappers that comprise either of these two types of soft/hard wood fibers (col. 7, lines 20-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to fabricate the inner wrapper of Kopsch et al modified by Hampl, Jr. to include either pine or eucalyptus as its wood fiber source because these types of woody fibers are known materials for cigarette paper fabrication in the tobacco art.

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5. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopsch et al (US. Pat. No. 5,944,026) in view of Hampl, Jr. (US. Pat. No. 5,921,249) and Drewett ((US. Pat. No. 5,172,708), and further in view of Schneider et al (US. Pat. No. 4,548,677).

While Kopsch modified by Hampl, Jr. and Drewett may not teach that the flax is selected from the group consisting of 50-90% flax fibers and 10-50% shive flax fibers, Schneider et al discloses cigarette paper having from 20 – 50% bast fibers of flax (col. 1, lines 43-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate flax having 50% bast fibers (which falls in the claimed range of bast fibers) in order to benefit by its influence on diffusing carbon monoxide out of the cigarette as taught in Schneider et al (col. 1, lines 38-41).

6. Claims 7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Counts et al (US. Pat. No. 5,692,525) in view of Ross (US. Pat. No. 5,439,010) and Hampl, Jr. (US. Pat. No. 5,921,249).

Counts et al discloses a porous plug wrap constructed, *preferably*, from soft wood fiber pulp, abaca-type cellulose or other long fibered pulp, said wrap having a high permeability ranging from 20,000 – 35,000 CORESTA (corresponding to the claimed “200 – 160,000 CORESTA”) and a basis weight of about 13 gsm (corresponding to the claimed about 12/ 12-15 gsm) (see col. 9, lines 39-46). While Counts et al differs from the claims because of the recitation that the wrap is an inner wrapper for a smoking article, this is not deemed to patentably distinguish the claims from the Counts et al reference because such language in the preamble of the claims merely recites an

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intended use. Further, the porous plug wrap of Counts et al is structurally similar, if not identical, to that of the claimed inner wrap. A claim containing recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim (see MPEP 2114 – which applies equally to “article” claims). Also, while Counts et al may not explicitly teach a wrap having a mixture of both wood fibers and fibers from another source, specifically 55 – 85 % wood fibers and 25-45% flax, or wood fiber of about 70% by weight and flax fiber of about 30% by weight, Ross discloses, in its “Background of Invention” section, that high-porosity plug wraps are known, and such “high-porosity” are generally achieved by incorporating into the plug wrap material fibres that are of different dimensions than the usual papermaking fibers (see col. 1, lines 53-61). Therefore, one having ordinary skill in the art would have been motivated to construct the plug wrap of Counts et al with pulp fibres that have different dimensions, especially since the Counts reference does not require any particular type or length of pulp fibre for use in its disclosed wrap.

Further, Hampl, Jr. discloses, in its “Background of Invention” section, that, in general, it is known that cigarette filter wrappers are typically made from flax or other cellulosic fibers, and if longer fibers are used to construct the wrapping paper, the paper will have a higher permeability (col. 1, lines 49-53). From this teaching, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the wrap of Counts et al and Ross to include flax fibers (which are longer than wood-pulp fibres) because use cellulosic fiber mixtures is known in the tobacco art as disclosed in

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Ross, and such mixture would result in a wrapper with higher permeability, due to the presence of the longer fibres, which is the Counts et al. Lastly, while Counts et al modified by Ross and Hampl, Jr. may not explicitly teach an inner wrapper having 55 – 85 % wood fibers and 25-45% flax, or wood fiber of about 70% by weight and flax fiber of about 30% by weight, it would have been obvious to one having ordinary skill in the art at the time of the invention to optimize the composition of the inner wrapper of Kopsch et al, which taught having a majority (if not, an entirety) of wood-based paper, by adding enough longer-length fibers to ensure a highly porous paper, pursuant to the teachings of Hampl, Jr., specifically flax fibers, and arrive at the claimed percentage of flax fibers, in order to achieve the optimum air-permeability of the cigarette wrapper.

Response to Arguments

7. Applicant's arguments, filed on February 20th, 2003, been fully considered but they are not persuasive.

- In response to applicant's argument that there is no suggestion to combine the references used in the prior art rejection, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner believes that the teachings found in the primary references are open to be

modified by those found in the applied secondary references. It is deemed that the rejections stated in the above paragraphs adequately address the validity of utilizing the disclosure of the these references.

- In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink, appearing to read "Dionne A. Walls", followed by a long horizontal line extending to the right.

Dionne A. Walls
May 1, 2003